

# EcoStruxure™ IT UPS Health Assessment

Created for:



# Executive Summary

We assessed your IT physical infrastructure, focusing on back-up power across your environment. We found and evaluated **348** devices in this report.

Several of your devices require attention to ensure the reliability of your network's back-up power.



## Critical Updates Needed

- 224 devices are outside of serviceable support
- 36 UPS batteries need to be replaced
- 186 security vulnerabilities need to be addressed
- 99 Active Critical Alarms



## Other Recommendations to Protect Against UPS Failure

- Lower the battery temperature for 81 devices to prolong their lives
- Plan and budget for 224 devices that are near end of life

# Inventory

## Devices

The EcoStruxure IT Gateway connects many types of devices and models, regardless of manufacturer. What we found for your IT environment is *at right*.

Note that devices that are not connected won't show here. For example, a UPS without a network management card will not connect.

Are any devices missing from this list? Let's talk about how to get them connected.

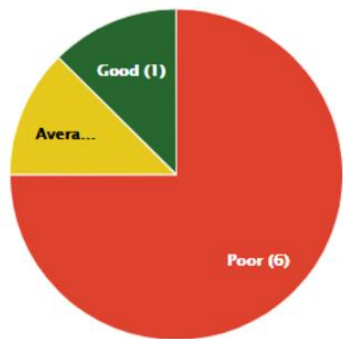
### **UPS's**

- SMT750RMI2U – 16 (International IEC)
- SMT750RM2U/C – 160 (US)

### **PDU's**

- AP7900/B – 160
- AP7920 - 16

# UPS Health



## Overview

Each device is given a score from 0–100. The pie chart shows the breakdown of your connected UPS devices.

- **Good (66–100):** No immediate action needed. Keep an eye on any device below 80.
- **Average (33–65):** May not be functioning optimally. Immediate action may be needed
- **Poor (0–32):** Immediate action needed.

## How is the score calculated?

The score is based on anonymous benchmarking of the following factors against comparable devices:

- UPS age
- Battery age
- Temperature of the battery
- Whether the UPS has a Critical Alarm or Lifespan Alarm (indicating near end of life)
- How well the phases in a 3-phase UPS are balanced

## Health vs. security vulnerability

The UPS health score indicates how well the device is operating and whether it is in danger of failing. Taking the recommended actions to improve UPS health limits your exposure to potential downtime.

The UPS score does not indicate whether the device has a security vulnerability. Security vulnerabilities are covered later in this report.

# UPS Health: Recommendations

## Replace Device (2017 or older)

- Qty 16 – AP7920 (replace with **AP7920B**)
- Qty 106 - AP7900/AP7900B (replace with **AP7900B**)
- Qty 85 – SMT750RM2U (replace with **SMT750RM2UC**)
- Qty 17 – SMT750RMI2U (replace with **SMT750RMI2U**)

## Replace battery

- Qty 36 – SMT750RM2U devices require a battery replacement. This device requires a **APCRBC123** cartridge.
- See UPS assessment PDF for list of device labels & serial #'s.

\*Note: When you replace a battery, you must manually reset the battery age on the network management card. If someone forgets to do this, the battery will appear older than it really is.



# UPS Health: Recommendations *(continued)*

Lower the battery temperature to 77°F (25 °C)

81 devices total, see health report for full list

UPS that can benefit from lowering temperature

| Device label | Model         | Serial Number | Location | Age   | Temperature |
|--------------|---------------|---------------|----------|-------|-------------|
| 10522lu01    | Smart-UPS 750 | 3S1947X11413  | LLL      | 3.0 Y | 30.4 °C     |
| 10649lu01    | Smart-UPS 750 | AS1518223220  | LLL      | 7.6 Y | 27.0 °C     |
| 50055lu01    | Smart-UPS 750 | AS1431130210  | LLL      | 8.3 Y | 32.1 °C     |
| 11901lu01    | Smart-UPS 750 | AS1721132510  | LLL      | 5.5 Y | 32.6 °C     |
| 11004lu01    | Smart-UPS 750 | 3S1833X00960  | LLL      | 4.3 Y | 33.5 °C     |
| 50070lu01    | Smart-UPS 750 | AS1431130215  | LLL      | 8.3 Y | 29.4 °C     |
| 10318lu01    | Smart-UPS 750 | AS1721341553  | LLL      | 5.5 Y | 31.4 °C     |
| 11008lu01    | Smart-UPS 750 | 3S1833X00875  | LLL      | 4.3 Y | 31.1 °C     |
| 50067lu01    | Smart-UPS 750 | AS1431130181  | LLL      | 8.3 Y | 33.6 °C     |
| 10217lu01    | Smart-UPS 750 | 3S1720X05692  | LLL      | 5.5 Y | 26.1 °C     |
| 11201lu01    | Smart-UPS 750 | 3S1822X12930  | LLL      | 4.5 Y | 26.6 °C     |
| 10312lu01    | Smart-UPS 750 | 3S1724X09077  | LLL      | 5.4 Y | 26.8 °C     |
| 10424lu01    | Smart-UPS 750 | 3S1814X18389  | LLL      | 4.6 Y | 25.3 °C     |
| 10421lu01    | Smart-UPS 750 | 3S1819X11050  | LLL      | 4.5 Y | 24.3 °C     |
| 00261lu01    | Smart-UPS 750 | 3S1903X13282  | LLL      | 3.8 Y | 27.9 °C     |
| 21014lu01    | Smart-UPS 750 | 3S1809X02167  | LLL      | 4.7 Y | 25.8 °C     |

# Security Vulnerabilities

348

Devices do not meet security standards

## 187 devices are vulnerable to Ripple20

Interim mitigation techniques are recommended. Firmware update is recommended when Schneider Electric has newer firmware that includes security fixes.

## 180 devices are vulnerable to TLSstorm

Interim mitigation techniques are recommended. Device firmware update is recommended when Schneider Electric has newer firmware that includes security fixes.

## 238 devices have vulnerable configurations

Configuration is recommended when vulnerable device configurations are detected.

## 186 devices with out of date firmware

Firmware update is recommended when Schneider Electric has newer firmware that includes security fixes.

## 106 devices should be replaced

Replacement is recommended when security issues cannot be addressed due to device hardware constraints or the device no longer being supported by the manufacturer.

# Security Vulnerabilities

## Firmware analysis



[Devices do not meet security standards](#)

New versions of firmware are made available throughout the year for the network management cards within your physical infrastructure devices. These releases typically contain a mix of bug fixes, new features, and general enhancements. Additionally, they often contain security related fixes that patch known vulnerabilities in commonly used network protocols or add features specific security. It is generally





# High Load % Warning

## Load distribution

- High load: 6
- Medium load: 125
- Low load: 24

This assessment is solely aimed at UPS's in a non-redundant setup. We do a trend analysis on the daily average load of your UPS to predict the load in the future.

## High load

| Label      | Model         | Serialnumber | Location | Load         | Projected load |
|------------|---------------|--------------|----------|--------------|----------------|
| 10510Rlu01 | Smart-UPS 750 | 3S1947X11330 | LLL      | 81% (Nov 16) | 82 (Jan 23)    |
| 00261lu01  | Smart-UPS 750 | 3S1903X13282 | LLL      | 83% (Nov 16) | 0 (Nov 24)     |
| 10318lu01  | Smart-UPS 750 | AS1721341553 | LLL      | 86% (Nov 16) | 0 (Nov 23)     |
| 10410Rlu01 | Smart-UPS 750 | 3S1845X14818 | LLL      | 91% (Nov 16) | 0 (Nov 27)     |
| 10511Rlu01 | Smart-UPS 750 | AS1734141368 | LLL      | 95% (Nov 16) | 0 (Nov 23)     |
| 10670Rlu01 | Smart-UPS 750 | 3S1924X16175 | LLL      | 96% (Nov 16) | 0 (Nov 23)     |

# EcoStruxure IT has even more to offer *(continued)*



## Active Lifespan Alarms

Do you know which UPS devices need to be replaced soon? Don't wait until an issue occurs.

This assessment lists only lifespan alarms—indicating devices are susceptible to failure or nearing end of life. This view helps you determine critical next steps to keep your network running.

# Appendix: Recommendation Explanations

## Replace UPS

We recommend replacing devices that are over 6 years old. Additionally, EcoStruxure IT benchmarks your devices against thousands of similar devices and may recommend replacement due to several wear factors. Contact us to discuss replacement UPS units.

## Battery Wear

We recommend replacing batteries that are over **XX** years old. Additionally, EcoStruxure IT benchmarks your devices against thousands of similar devices and may recommend battery replacements due to several factors, such as a combination of battery age, temperature, and the cumulative count of registered discharges (cycles). Contact us to discuss replacement batteries.

## Lower the battery temperature to 77°F

The optimum operating temperature for a lead-acid battery is 68-77°F. An elevated temperature reduces the battery's longevity. Contact us to discuss cooling and airflow management solutions.

## Check battery voltage and frequency

When batteries go through too many charge cycles, their lifespans diminish. Batteries with this recommendation have gone through at least **XX%** of their lifetime cycles. Contact us to talk about ways to improve battery cycling.

## Purchase an Extended Warranty

For all UPS units that are more than three years old, we recommend purchasing an extended warranty.

Life Is On



**Schneider**  
Electric